

## ABSTRACT

The present invention is a system and method of facilitating automatic generation of the source code in a convenient and efficient manner. In one embodiment of the present invention, a programmable system on a chip (PSoC) boot file generation method is utilized to create a boot file. A boot template file is created comprising special symbolic variable names that point to configuration registers within a programmable system on a chip (PSoC). User module selections are received with delineation of preferred configurations and functions associated with components of said programmable system on a chip (PSoC). Application files are automatically generated based upon user selections of PSoC configurations and functions. The special symbolic variable names are substituted or replaced with actual configuration register names. In one embodiment, a present invention programmable system on a chip (PSoC) boot file generation method also facilitates providing interrupt processing routines to the appropriate vector.